IN THE SPECIFICATION:

Please replace paragraphs [0032], [0034], [0036] and [0037] as follows:

[0032] Figure 6 illustrates a sectional view of an embodiment of a substrate cleaning chamber 600 of the invention. Chamber 600 includes chamber body 601 and a lid 611 ~~602~~ that cooperatively define a processing cavity 615 therebetween. A substrate support member 604 is centrally disposed within processing cavity 615 of chamber body 601, and is configured to support a substrate 605 on an upper surface 606 thereof. Substrate support 604 may be manufactured from aluminum, stainless steel, carbon steel, ceramic materials, titanium, and/or other materials used to manufacture substrate support members in the semiconductor art. Additionally, substrate support member 604, as well as other components in chamber 600, may be coated with a non-reactive coating to prevent reactivity with processing fluids, gases, and/or plasmas used in the chamber. Coatings such as polyimide and titanium nitride (TiN), for example, may be used to coat the substrate support member 604, as well as other components of chamber 600, in order to develop resistance to etch plasmas, fluids, and gases that may be used in chamber 600.

[0034] The upper surface 606 of substrate support member 604 may include a plurality of vacuum apertures 613 formed therein, where each of apertures 613 is in fluid communication with a vacuum chamber 608 positioned on the lower portion of substrate support member 604. Vacuum chamber ~~Chamber~~ 608 is defined by the lower surface 616 of substrate support member 604 and the inner walls of the hemispherical support member 602. Substrate 605 may be supported on substrate support member 604 through, for example, a vacuum chucking process, where a vacuum is applied to the plurality of vacuum apertures 613 in order to secure a substrate thereto. The vacuum may be applied to apertures 613 by opening a valve 612 ~~609~~ positioned between vacuum chamber 608 and apertures 613, thus bringing apertures 613 into fluid communication with vacuum chamber 608. Vacuum chamber ~~Chamber~~ 608 is in fluid

communication with a vacuum pump (not shown) via conduit 626 formed into the lower portion of shaft 620, and therefore, vacuum chamber 608 may be maintained at a low pressure. In alternative embodiments, mechanical chucking and/or clamping processes may be implemented individually or cooperatively with a vacuum chucking process to secure a substrate to the substrate support member 604.

[0036] An annular pumping channel 609 is positioned about the perimeter of the chamber body 601 proximate the edge of substrate support member 604. Pumping channel 609 is in communication with a pumping device 614, such as a vacuum pump, for example. The structural configuration of pumping channel 609, in conjunction with the central location of substrate support member 604, operates to generate a gas flow that radiates outward from the center of substrate support member 604. An air knife assembly 617 ~~601~~ configured to generate a confined high pressure laminar-type stream of gas that may be directed proximate the surface of substrate 605 in a direction that is generally parallel to the surface of the substrate is positioned proximate the perimeter of substrate support member 604. Therefore, once actuator 610 has generated a broadband impulse sufficient to dislodge the particles from the substrate surface, air knife 601 may be used to sweep the particles away from the substrate surface and into pumping channel 609 for removal from chamber 600.

[0037] In operation, chamber 600 operates to remove particles from a substrate using mechanical forces. The substrate having particles thereon 605 is positioned on substrate support member 604 by a robot (not shown). The substrate 605 is then vacuum chucked to the substrate support member 604 via opening of valve 609, which operates to bring apertures 613 into fluid communication with vacuum chamber 608. Vacuum chamber 608, which is formed by the inner walls of hemispherical support member 602 and the lower surface 616 of substrate support member 604, is in communication with a vacuum source (not shown) via conduit 626. Once substrate 605 is vacuum chucked to substrate support member 604, actuator 610 may be activated, which operates to generate a broadband impulse. The impulse is transmitted through hemispherical reinforcement member 602 into substrate support member 604 and then

to substrate 605. This impulse causes the contamination particles on the substrate surface to be dislodged therefrom. Once the particles are dislodged, air knife 617 ~~601~~ may be used to flow a laminar stream of high pressure air across the substrate surface, which operates to sweep the dislodged particles away from the substrate surface, thus preventing the particles from re-depositing thereon. The particles may then be removed from chamber 600 via pumping channel 609.

IN THE DRAWINGS:

Please amend Figure 6 to delete duplicate numerals 600, 601, 602, 605, and 609 and undefined numeral 603, as shown in the corrected redline copy of Figure 6. The use of duplicate number 600 indicating the vacuum chamber is eliminated by replacing duplicate 600 with 608. The use of duplicate number 601 indicating the air knife is eliminated by replacing duplicate 601 with 617. The use of duplicate number 602 indicating the lid is eliminated by replacing duplicate 602 with 611. The use of duplicate 609 indicating a valve is eliminated by replacing duplicate 609 with 612. The use of duplicate 605 is eliminated by deleting the reference pointing to the reinforcement member, which is represented by 602. The undefined 603 is deleted from Figure 6, and 604 is added to the figure to show the substrate support member.

A replacement sheet for Figure 6 is attached in addition to the redline copy which is labeled "Annotated Marked-up Drawings".